

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,668	01/18/2002	Stefan Lundgren	230.014	6841
759	90 05/05/2004	4 EXAMINER		INER
David D Stein			ASHBURN, STEVEN L	
Boyle Fredricks	on Newholm Stein & Grat	z	<u></u>	
250 Plaza Suite	1030		ART UNIT	PAPER NUMBER
250 East Wisconsin Avenue			3714	
Milwaukee, WI 53202			DATE MAILED: 05/05/2004	

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s) 10/031,668				18-
Examiner Stoven Ashburn 3714 37		Application No.	Applicant(s)	71
Steven Ashburn 3714 - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. THE DATE OF THIS COMMUNICATION. If the period for reply specified above is less than thiny (30) days, a reply within the statisty reminiman of thiny (30) days with a considered timely. If the period for reply specified above, it is naturally period via largety and will deprive St (40) (MONTH'S from the mailing) asset of this communication of the providence of the communication. If the period for reply specified above, it is naturally period via largety and will deprive St (40) (MONTH'S from the mailing asset of this communication. If the period for reply specified above, it is naturally period via largety and will deprive St (40) (MONTH'S from the mailing asset of this communication. If the period for reply specified above, it is not an interval to the period of the communication. Any reply received by the Office later than these months after the mailing date of this communication, even if timely filed, may replice any replication. This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s)	Office Action Comments	10/031,668	LUNDGREN ET AL.	
- The MALING DATE of this communication appears on the cover sheet with the correspondence address - Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of ten may be available used the provisions of 3 CCR 1.138(a). In one event, however, may a reply be timely filed. If the period for may is specified above is less than thirty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely. If the period for may is specified above is less than thirty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely. If the period for may is specified above is less than thirty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely. If the period for may is specified above is less than thirty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely. If the period for may is specified above is less than thirty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely. If the period for may is specified above is less than thirty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely. If the period for may is specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If the period for may is specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If the period for may is specified to be sold as the statutory of the maximum of thirty (30) days will be considered to the same and the statutory of the days of the same and the statutory of the days of the same and the s	Office Action Summary	Examiner	Art Unit	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - after SIX (6) MONTHS from the mailing date of this communication. - if the proof or pely secredic above, the maximum statutory period will apply and will apply 610 days will be considered timely. - if NO period for regly is secredical above, the maximum statutory period will apply and will apply 610 days will be considered timely. - if NO period for regly is secredical above, the maximum statutory period will apply and will apply 610 (MONTHS from the mailing date of this communication. - if NO period for regly is secredical above, the maximum statutory period will apply and will apply 610 (MONTHS from the mailing date of this communication, even if simely 666, may reduce any secretical apply 610 (MONTHS from the mailing date of this communication, even if simely 666, may reduce any secretical apply 610 (MONTHS from the mailing date of this communication, even if simely 666, may reduce any secretical apply 610 (MONTHS from the mailing date of this communication, even if simely 666, may reduce any secretical apply 610 (MONTHS from the mailing date of this communication, even if simely 666, may reduce any secretical apply 610 (MONTHS from the mailing date of this communication, even if simely 666, may reduce any secretical application. - if No period from the mailing date of this communication, even if simely 666, may reduce any secretical application. - if No period from the mailing date of this communication, even if simely 666, may reduce any secretical application is one of the secretical application. - if No period from the mailing date of this communication, even if simely 666, may reduce any secretical application of the mailing date of this communication. - if No period from the from the mailing date of this communication. - if No period from the from the mailing date of this communication. - if No period from the period from the from the mailing date of the period from the from the		1		
THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be validable under the provisions of 3°C PR 1.136(a). In or event, however, may a reply be timely filed after 50 (6) MONTISE from the maining date of this communication. **Power of the communication of the communicati	The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address	
1) ⊠ Responsive to communication(s) filed on 18 January 2002. 2a	THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing	36(a). In no event, however, may a reply be till within the statutory minimum of thirty (30) da vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONI	mely filed ys will be considered timely, n the mailing date of this communicati ED (35 U.S.C. § 133).	on.
2a) This action is FINAL. 2b) This action is non-final. 3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4 Claim(s) 1-52 is/are pending in the application. 4a) Of the above claim(s) is/are allowed. 6 Claim(s) is/are allowed. 6 Claim(s) 1-52 is/are rejected. 7 Claim(s) is/are objected to. 8 Claim(s) is/are objected to. 8 Claim(s) are subject to restriction and/or election requirement. Application Papers 9 The specification is objected to by the Examiner. 10 The drawing(s) filed on 18 January 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11 The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12 Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b Some * c None of:	Status			
2a) This action is FINAL. 2b) This action is non-final. 3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4 Claim(s) 1-52 is/are pending in the application. 4a) Of the above claim(s) is/are allowed. 6 Claim(s) is/are allowed. 6 Claim(s) 1-52 is/are rejected. 7 Claim(s) is/are objected to. 8 Claim(s) is/are objected to. 8 Claim(s) are subject to restriction and/or election requirement. Application Papers 9 The specification is objected to by the Examiner. 10 The drawing(s) filed on 18 January 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11 The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12 Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b Some * c None of:	1) Responsive to communication(s) filed on 18 Ja	nuary 2002.		
3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4 Claim(s) <u>7-52</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5 Claim(s) is/are allowed. 6 Claim(s) is/are rejected. 7 Claim(s) is/are objected to. 8 Claim(s) is/are objected to. 8 Claim(s) are subject to restriction and/or election requirement. Application Papers 9 The specification is objected to by the Examiner. 10 The drawing(s) filed on 18 January 2002 is/are: a accepted or b objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11 The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12 Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a All b Some * c Note of the priority documents have been received. 2 Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(e) 1 Notice of References Cited (PTO-892)				
Application of Claims 4) □ Claim(s) 1-52 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on 18 January 2002 is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) □ Notice of References Cited (PTO-892) 2) □ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) □ Information Discosure Statement(s) (PTO-1449 or PTO/S8)09 5) □ Notice of Informal Patent Application (PTO-152)	·		osecution as to the merits	is
4) ☐ Claim(s) 1-52 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are objected to. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 1) ☒ Notice of References Cited (PTO-1449 or PTO/58/05) 5 ☐ Notice of Indepensance Paper NotisyMail Date	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.	
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received.	Disposition of Claims			
5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Oraftsperson's Patent Drawing Review (PTO-948) 5) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informat Patent Application (PTO-152)	4) Claim(s) 1-52 is/are pending in the application.			
6) Claim(s) 1-52 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 18 January 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Autachment(s) Autachment(s) Autachment(s) Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Notice of Informal Patent Application (PTO-152)	4a) Of the above claim(s) is/are withdrav	vn from consideration.		
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on	5) Claim(s) is/are allowed.			
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 18 January 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Diagram Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Notice of Informal Patent Application (PTO-152)				
Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 18 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Altachment(s) Paper No(s)/Mail Date Paper No(s)/Mail Date Paper No(s)/Mail Date Paper No(s)/Mail Date Did Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)				
9) ☐ The specification is objected to by the Examiner. 10) ☑ The drawing(s) filed on 18 January 2002 is/are: a) ☑ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☑ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 10 ☑ Notice of References Cited (PTO-892) 21 ☐ Interview Summary (PTO-413) Paper Not(s)/Mail Date Paper Not(s)/Mail Date 51 ☐ Notice of Informal Patent Application (PTO-152)	8) Claim(s) are subject to restriction and/or	election requirement.		
10) ☐ The drawing(s) filed on 18 January 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 10 ☐ Notice of References Cited (PTO-892) 21 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 22 ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 33 ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 55 ☐ Notice of Informal Patent Application (PTO-152)	Application Papers			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some colon None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) I) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Notice of Informal Patent Application (PTO-152)	9)☐ The specification is objected to by the Examine	r.		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Oherometrical Notice of References Cited (PTO-892)	10)⊠ The drawing(s) filed on 18 January 2002 is/are:	a)⊠ accepted or b)☐ objected	d to by the Examiner.	
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☑ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)				
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Attachment(s) Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)				(d).
12) △ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) △ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.	
a) ⊠ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	Priority under 35 U.S.C. § 119			
2. ☐ Certified copies of the priority documents have been received in Application No 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Notice of References Cited (PTO-892)	a)⊠ All b) Some * c) None of:)-(d) or (f).	
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) Notice of References Cited (PTO-892)			ion No	
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Notice of References Cited (PTO-892)				
* See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) Notice of References Cited (PTO-892)		- -	ed iii tiiis National Otage	
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) A) Interview Summary (PTO-413) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)		` ''	ed.	
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) A) Interview Summary (PTO-413) Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)				
Paper No(s)/Mail Date Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Notice of Informal Patent Application (PTO-152)		 .		
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)				
	3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) 🔲 Notice of Informal F		

Art Unit: 3714

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 9, 10, 12, 15-28, 30, 31, 33, 36-45 and 47-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Evans, US 3,717,857 (Feb. 20, 1973)

Evans discloses an athletic swing measurement system for measuring characteristics of the swing of an athlete's arm, bat or club. *See abstract*. An accelerometer is provided for measuring acceleration or velocity and strain gages for measuring flex and twist of a plate placed on an athlete's arm or within a bat or club, such as a golf club. *See id*. Signal measurements of each gage are transmitted to a receiver where they are converted for display, storage and comparison. *See id*. As discussed below, Evans teaches each and every feature of the listed claims.

Claims 1, 17, 20, 22 and 38.

- a. An input device for entering result data for one or more predetermined parameters from one or several performed stages. See fig. 2(21-23); col. 3:6-47.
- b. A calculating device connected to the input device and devised to calculate, for each of the parameters, a characteristic measurement value for a predetermined

characteristics measurement, in dependence upon the result data. See fig 2(30-33); col. 4:7-48.

A profile generation device, connected to the calculation device and devised to c. generate a characteristics profile by compiling the calculated characteristics measurement values including a reference database containing a pre-stored normal characteristic profile and a comparison device connected to the profile generation device and the reference database, and devised to generated a comparison profile by comparing the characteristic profile with the pre-stored normal characteristic profile. See fig. 2(36-42); col. 4:7-48.

Claim 2, 23, 39 and 44. A device for presentation of the comparison provide devised to present the profile graphically. See fig. 2(32,35,42)

Claim 3, 24 and 40. Comparison device is devised to generate a comparison profile by applying a predetermined mathematical operation to the characteristic profile and the normal profile. See fig. 2(41); col. 4:33-48.

Claim 4, 25 and 41 Comparison device is devised to generate a comparison profile in the form of a difference profile, by calculating the difference between characteristics measurement values for each parameter of the characteristic profile and the normal profile. See id.

Claim 5, 26 and 42. Presentation device is devised to visualize, for each parameter, a current characteristic measurement value and a normal characteristic measure value on the same diagram. See fig. 2(32,35,42)

Art Unit: 3714

Claims 6, 18, 19, 21, 27 and 43. A selection device connected to the profile generation device or the comparison device or a memory containing a profile data structure and devised to select, in dependence of the characteristic profile or comparison profile, a pre-stored action program. See col. 5:1-14.

Claim 7, 28 and 45. Characteristic profile is a profile for a practicer of the stage, whereas the normal characteristic profile is a profile calculated from a group of practicers with common properties. *See col. 4:33-48*. The characteristic profile is calculated from a group having common sport and/or parameter.

Claim 9, 30 and 47. Practicer is a sports practicer and the stage is a game round of the sport, the parameter is a game parameter and the action program is a training model for improvement of the practicer's player properties within the sport. See col. 1:37-47.

Claim 10, 31 and 48. A device arranged for entering player data for the sports practicer, and wherein the normal profile is based upon corresponding player data (e.g. age, gender, handicap or ranking). See col. 1:37-47. Normal profile is based on sport and/or activity within a sport.

Claim 12, 33 and 50. Presentation device of the comparison profile is further devised to visually present the characteristics profile or the comparison profile in the form of a curve chart where the level of the curve for each parameter corresponds to the characteristic measurement value. See col. 4:62-5:14.

Art Unit: 3714

Claim 15 and 36. A computer structure for storing of characteristics measurement values in a memory. See fig. 2(38).

Claim 16 and 37. A computer structure for storing of characteristics profiles values in a memory. See fig. 2(42).

Claims 1, 6-11, 17, 19, 23, 25, 29, 32, 34, 46, 49 and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by Morgan, US 6,461,245 (Oct. 8, 2002).

Morgan discloses a golf improvement system comprises a club and course registration form containing information about a course including par of each hole and distance from a tee to a green; a player score card for recording a round of golf played by the player on the course, the score card including a plurality of circles corresponding to each hole, each circle when filled in corresponding to a data entry concerning the hole being played; a computerized database containing information from the club and registration form, the player score card, and information on the player's peer group; and a report generated by the computerized database and containing statistics on the player's playing skills. *See abstract*. As discussed below, Morgan teaches each and every feature of the listed claims.

Claims 8, 29 and 46. Including the features of the parent claims, Morgan discloses the following:

- a. An input device for entering result data for one or more predetermined parameters from one or several performed stages. See col. 2:33-44; 3:30-35.
- b. A calculating device connected to the input device and devised to calculate, for each of the parameters, a characteristic measurement value for a predetermined characteristics measurement, in dependence upon the result data. See col. 2:33-44.

- A profile generation device, connected to the calculation device and devised to c. generate a characteristics profile by compiling the calculated characteristics measurement values including a reference database containing a pre-stored normal characteristic profile and a comparison device connected to the profile generation device and the reference database, and devised to generated a comparison profile by comparing the characteristic profile with the pre-stored normal characteristic profile. See col. 2:33-44; 6:48-7:2.
- d. Characteristic profile is a profile for a practicer of the stage, whereas the normal characteristic profile is a profile calculated from a group of practicers with common properties. See col. 1:5-11, 4:1-29, 7:3-51.
- e. Normal characteristics profile is a profile for an average practicer within the group. See id.

Claims 11, 32 and 49. In addition to the features of parent claims 6, 9, 10, 19, 25, 32, Morgan discloses a presentation device of the comparison profile is further devised to visually present the characteristics profile or the comparison profile in the form of a bar diagram having one bar for each parameter where the bar height corresponds to the characteristic measurement value. See fig. 9A-9J; col. 9:60-10:8.

Claims 13, 34 and 51. Morgan discloses analyzing the player properties of a golfer whereby the game parameters are various shot types and the characteristic measurement is the average number of shots per round. See id.

Art Unit: 3714

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 14, 35 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morgan in view of Cleveland, US 5,816,953 (Oct. 6, 1998).

Morgan does not disclose a system adapted to track the properties of a tennis player. Regardless, Cleveland discloses an analogous system for tracking the performance of a tennis player. In view of Cleveland, it would have been obvious to an artisan at the time of the invention of modify the training system disclosed by Morgan, wherein the type and number of successful shots are recorded in comparison to unsuccessful ones, to add the feature of tracking the properties of a tennis player. As suggested by Cleveland, tracking and recording a tennis player's performance enhances the players improvement in the sport by allowing it to be compared and with prior performances. See col. 2:29-4:8.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Ashburn whose telephone number is 703 305 3543. The examiner can normally be reached on Monday thru Friday, 8:00 AM to 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

s.a.

MARK SAGER PRIMARY EXAMINER